

AMENDMENTS TO THE CLAIMS

Please cancel claims 8 and 10, add claims 11-17, and amend claims 1, 4 and 9, such that the status of the claims is as follows:

1. (Currently Amended) A buffer for an elevator system, the buffer comprising:

a conical coil spring,

wherein the buffer is configured to be disposed at one end of a hoistway of the elevator system for contacting a vertically moving member of said elevator system in the event of an abnormal overrun,

wherein the conical coil spring includes a spiral coil element that comprises a series of coils,

wherein a radius of the spiral coil element decreases along an axis of the conical coil spring such that if the spiral coil spring is fully compressed, the coils of the spiral coil spring are configured to be arranged in a substantially planar configuration, ~~and~~

wherein a thickness of the coil element is substantially uniform between an outermost coil and an innermost coil, and

wherein a thickness of the innermost coil varies so as to create a substantially flat top contact surface.

2. (Previously Presented) The buffer as recited in claim 1, wherein an outer radius of a coil is less than an inner radius of an adjacent coil, thereby permitting said coils to be compressed axially without experiencing radial interference.

3. (Previously Presented) The buffer as recited in claim 2, wherein a cross-section of the coil element is circular.

4. (Currently Amended) The buffer as recited in claim 2, wherein a cross-section of the coil element ~~[[is]]~~ has an arcuate outer surface.

5. (Previously Presented) The buffer as recited in claim 2, wherein a transverse coil pitch of the coil element is constant.

6. (Previously Presented) The buffer as recited in claim 1, wherein the vertically moving element is an elevator car.

7. (Previously Presented) The buffer as recited in claim 1, wherein the vertically moving element is a counterweight.

8. (Canceled)

9. (Currently Amended) The buffer as recited in claim 1, wherein a thickness of the outermost coil ~~radially~~ varies so as to create a substantially flat bottom contact surface.

10. (Canceled)

11. (New) A buffer for an elevator system, the buffer comprising:
a conical coil spring,
wherein the buffer is configured to be disposed at one end of a hoistway of the
elevator system for contacting a vertically moving member of said elevator
system in the event of an abnormal overrun,
wherein the conical coil spring includes a spiral coil element that comprises a series
of coils,
wherein a radius of the spiral coil element decreases along an axis of the conical
coil spring such that if the spiral coil spring is fully compressed, the coils of
the spiral coil spring are configured to be arranged in a substantially planar
configuration,

wherein a thickness of the coil element is substantially uniform between an outermost coil and an innermost coil, and
wherein a thickness of the outermost coil varies so as to create a substantially flat bottom contact surface.

12. (New) The buffer as recited in claim 11, wherein an outer radius of a coil is less than an inner radius of an adjacent coil, thereby permitting said coils to be compressed axially without experiencing radial interference.

13. (New) The buffer as recited in claim 12, wherein a cross-section of the coil element is circular.

14. (New) The buffer as recited in claim 12, wherein a cross-section of the coil element has an arcuate outer surface.

15. (New) The buffer as recited in claim 12, wherein a transverse coil pitch of the coil element is constant.

16. (New) The buffer as recited in claim 11, wherein the vertically moving element is an elevator car.

17. (New) The buffer as recited in claim 11, wherein the vertically moving element is a counterweight.